State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: ROBERT CAMARGO
Program Advisor
Roadway Preservation

Date: September 29, 2011
File: 04-CC-242-PM R0.0/R3.4
PSSR Refresher
EA 04-26980K - SHOPP 201.121
Pavement Rehabilitation
EA 04-4G060K - SHOPP 201.110
Bridge Rehabilitation

From: YADOLLAH FATHOLLAHI for
Project Management East

Subject: Project Initiation Document (PID) Refresher

Background

The Project Scope Summary Report (PSSR) for the above-referenced project EA 04-26980K was approved on October 2, 2001 to program in the 2002 State Highway Operation and Protection Program (SHOPP), HA-22 Program, but not programmed. This project cost has been "refreshed" for programming in the 2012 SHOPP.

Project Scopes

In Contra Costa County in the city of Concord on Route 242 from Route 680 to Route 4, this project proposes the following improvements:

1) **Pavement Rehabilitation**: replace the failed PCC with 3rd stage cracks, repair spalls, seal cracks, grind the whole width of the PCC pavement, repair failed outside shoulders, overlay on-ramps and off-ramps with AC, improve drainage work, upgrade Metal Beam Guardrails to current standards as needed, remove and replace Type A dikes with Type C, E, or F dikes at specific locations, upgrade curb ramps and pedestrian facilities to ADA standards, and repair southbound Olivera Road loop on-ramp due to slope slipping
2) **Bridge Rehabilitation**: replace bridge approach slabs and bring the existing bridge approach rails to current standards

Following is the breakdown of the project capital outlay and support cost estimates for the two aforementioned proposals, based on Headquarters' recommended escalation rate of 4% for all escalation computations, 10% mobilization and 20% contingency for construction costs, and 20% of construction costs for support costs.

1) Pavement Rehabilitation: (EA 26980K)

PRELIMINARY PROJECT CAPITAL COST ESTIMATE SUMMARY

Item No.		Lane-miles / Number	Quantity	Unit	Unit Price	Item Cost	
	PAVEMENT WORK						
1	Digouts		1,080	CY	$70.0	$76,000	
2	AC Overlay of AC Pavement (recycle not included) - Mainline						
	a) Cold Plane AC Pavement		112,060	SQYD	$1.5	$168,000	
	b) Rubberized Hot Mix Asphalt (Gap Graded), RHMA-G		2,610	TON	$95.0	$248,000	
	c) Hot Mix Asphalt (Type A), HMA-A		13,180	TON	$80.0	$1,054,000	
3	Hot Recycled AC						
4	AC Overlay of PCC Pavement						
5	PCC Pavement Work						
	a) grind PCC slabs		86,490	SQYD	$7.0	$605,000	
	b) replace failed PCC slabs w/ Rapid Strength Concrete		1,080	CY	$600.0	$648,000	
	c) Reserve 10% add'l fund of PCC slabs replacem't for CTB layer per Materials Recommendation		LS	LS	LS	$65,000	
6	Ramps and OC/UC Approaches						
	a) Cold Plane AC Pavement		57,630	SQYD	$1.5	$86,000	
	b) Rubberized Hot Mix Asphalt (Gap Graded), RHMA-G		9,400	TON	$95.0	$893,000	
7	Reconstruct Lane(s) - Outside Shoulders						
	a) Cold Plane AC Pavement		2,390	SQYD	$1.5	$4,000	
	b) Rubberized Hot Mix Asphalt (Gap Graded), RHMA-G		660	TON	$95.0	$62,700	
8	**Repair Southbound Olivera Road Loop On-ramp Due To Slope Slipping (Excluding 10% Mobilization & 20% Contingency) - Total Capital Cost**					**$201,000**	(1)
	a) Cold Plane AC Pavement		*3,020*	*SQYD*	*$1.5*	*($5,000)*	(2)
	b) Rubberized Hot Mix Asphalt (Gap Graded), RHMA-G		*410*	*TON*	*$95.0*	*($39,000)*	
	c) Hot Mix Asphalt (Type A), HMA-A		*610*	*TON*	*$80.0*	*($49,000)*	
	d) Class 2 Aggregate Base		*220*	*CY*	*$100.0*	*($22,000)*	
	e) Pavement Delineation		*LS*	*LS*	*LS*	*($12,000)*	
	f) Misc Items (misc paving, misc roadside items removal, & erosion		*LS*	*LS*	*LS*	*($12,000)*	
	g) Other misc items (Traffic Control & TMP w/ COZEEP)		*LS*	*LS*	*LS*	*($58,000)*	
	h) Construction Site BMPs (approximately 2% of total project cost)		*LS*	*LS*	*LS*	*($4,000)*	
9	Edge Drain (list side/mile)						
	COST SUBTOTAL					**$4,111,000**	

Notes:

(1) This is the Total Capital Cost (current dollars) for the **"Repair SB Olivera Rd On-ramp"** proposal only, excluding 10% Mobilization and 20% Contingency. Following is the project capital outlay and support cost estimates for this proposal, including 10% Mobilization and 20% Contingency.

Capital Cost:

Construction Capital:	*$261K (current dollars)*
Right of Way Capital:	*$0 (current dollars)*
Ready-to-list (RTL) cost in November 2015:	*$297K (escalated)*
Mid-year construction cost in September 2016:	*$308K (escalated)*

Capital Support Cost: $52K (current dollars)

(2) Costs as shown in parentheses and italics are included in the Total Capital Cost for the **"Repair SB Olivera Rd On-ramp"** proposal.

Item No		Does the Project Include? (Yes/No)	Quantity	Unit	Unit Price	Item Cost
	NON-PAVEMENT WORK					
10	Drainage Rehabilitation (Work type: roadside, offsite)	Yes	LS	LS	LS	$100,000
11	Pedestrian Facilities: ADA Curb Ramps & Sidewalks	Yes				
	a) Upgrade ADA Curb Ramps		16	EA	$5,000.0	$80,000
	b) Upgrade ADA Traffic Islands		2	EA	$3,000.0	$6,000
	c) Misc. ADA Electrical Items		LS	LS	LS	$25,000
12	Metal Beam Guardrails (MBGR)	Yes				
	a) New installation		6,670	LF	$20.0	$133,400
	b) Reconstruction		1,360	LF	$20.0	$27,200
	c) Removal of existing MBGR		1,480	LF	$9.0	$13,320
13	Replace AC Dike (C, E, or F)	Yes	LS	LS	LS	$80,000
14	Traffic Control	Yes	LS	LS	LS	$225,000
15	TMP (COZEEP included)	Yes	LS	LS	LS	$297,000
16	Pavement Delineation	Yes	LS	LS	LS	$108,000
17	Terminal End Sections (Type SRT)	Yes	1	EA	$2,500.0	$2,500
18	Roadside Signs	Yes	LS	LS	LS	$10,000
19	Develop Water Supply	Yes	LS	LS	LS	$18,000
20	Clearing & Grubbing	Yes	LS	LS	LS	$18,000
21	Resident Engineer's Office Space	Yes	LS	LS	LS	$90,000
22	Environmental Compliance	Yes	LS	LS	LS	$15,000
23	Highway Planting & Replacement Planting	Yes	LS	LS	LS	$10,000
24	Miscellaneous Paving	Yes	LS	LS	LS	$20,000
25	Erosion Control	Yes	LS	LS	LS	$10,000
26	Relocation/Removing Misc Roadside Items	Yes	LS	LS	LS	$15,000
27	Stormwater: Construction Site BMPs (Approx. 2% of total project cost)	Yes	LS	LS	LS	$108,000
	COST SUBTOTAL					***$1,411,000***
	SUM OF SUBTOTALS					***$5,522,000***
	20% Contingency					***$1,104,000***
	10% Mobilization					***$552,000***
28	Right of Way (Utility Relocation)	Yes	LS	LS	LS	$5,000
	TOTAL PROJECT COST (Current Dollars)					**$7,183,000**

2) Bridge Rehabilitation: (EA 4G060K)

PRELIMINARY PROJECT CAPITAL COST ESTIMATE SUMMARY					
Item No.		Quantity	Unit	Unit Price	Item Cost
	BRIDGE REHABILITATION				
1	Remove Concrete (Bridge Approach Slabs)	600	CY	$70.0	$42,000
2	Replace Bridge Approach Slabs w/ Rapid Strength Concrete	600	CY	$1,200.0	$720,000
3	Paving Notch & Joint Seal	LS	LS	LS	$80,000
4	Terminal End Sections (Type SRT)	2	EA	$2,500.0	$5,000
5	Upgrade Bridge Approach Rails (Bridge End Connection)				
	a) Replace/upgrade bridge approach rails	280	LF	$20.0	$6,000
	b) Reconstruct bridge approach rails	350	LF	$20.0	$7,000
	c) Remove existing bridge approach rails	280	LF	$9.0	$3,000
	COST SUBTOTAL				**$863,000**
	10% Mobilization				**$86,000**
	20% Contingency				**$173,000**
6	Right of Way (Utility Relocation)	LS	LS	LS	$0
	TOTAL PROJECT COST (Current Dollars)				**$1,122,000**

It is recommended that the pavement rehabilitation work along with associated guardrails, dikes, and ramp slip out repair be programmed in the same pavement rehabilitation program 201.121 in the 2012 SHOPP under EA 26980K. Following is the project capital outlay and support cost estimates for this combined proposal.

Capital Cost:

Construction Capital: *$7.178M (current dollars)*
Right of Way Capital: *$5K (current dollars)*
Ready-to-list (RTL) cost in November 2015: *$8.185M (escalated)*
Mid-year construction cost in September 2016: *$8.486M (escalated)*

Capital Support Cost: $1.436M (current dollars)

For the **"Bridge Rehabilitation"** proposal, it is recommended to be programmed in the bridge rehabilitation program 201.110 in the 2012 SHOPP in the 2015/2016 FY under a reserved EA 4G060K. Following is the project capital outlay and support cost estimates.

Capital Cost:

Construction Capital: *$1.122M (current dollars)*
Right of Way Capital: *$0 (current dollars)*
Ready-to-list (RTL) cost in November 2015: *$1.279M (escalated)*
Mid-year construction cost in September 2016: *$1.326M (escalated)*

Capital Support Cost: *$224K (current dollars)*

Should you have any questions or need additional information, please contact Jonathan Dang, Project Engineer, at (510) 622-5963 or myself at 510-286-6018.

Attachments:
(1) Project Fact Sheet w/ Updated Schedule
(2) Updated Project Capital & Support Cost Estimate Summary (Current & Escalated)
(3) Updated Right of Way Data Sheet
(4) Updated Materials Study and Recommendations
(5) Preliminary Environmental Analysis Report
(6) Transportation Management Plan
(7) Risk Management Plan
(8) Short Form - Storm Water Data Report (SWDR) – Signature Sheet

c: PPang/RCamargo/YFathollahi/RBlanco/Project File

JD/jd

FACT SHEET

Pavement Rehabilitation (CAPM) & Bridge Rehabilitation
Contra Costa County

Project EA: *Pavement Rehabilitation:* 04-26980K (Project ID 0412000159)
Bridge Rehabilitation: 04-4G060K (Project ID TBD)

Project Location: In Contra Costa County in the city of Concord on Route 242 from Route 680 (PM R0.00) to Route 4 (PM R3.40)

Project Description: 1) *Pavement Rehabilitation:* replace the failed PCC with 3rd stage cracks, repair spalls, seal cracks, grind the whole width of the PCC pavement, repair failed outside shoulders, overlay on-ramps and off-ramps with AC, improve drainage work, upgrade Metal Beam Guardrails to current standards as needed, remove and replace Type A dikes with Type C, E, or F dikes at specific locations, upgrade curb ramps and pedestrian facilities to ADA standards, and repair southbound Olivera Road loop on-ramp due to slope slipping
2) Bridge Rehabilitation: replace bridge approach slabs and bring the existing bridge approach rails to current standards

Purpose and Need:

Need:
The need for this project is to improve the poor condition of the existing facilities and improve safety.

Purpose:
The purpose of this project is to provide preventive treatments to preserve the good condition of the existing roadway pavement and to provide pavement rehabilitation to extend its service life.

Sponsor Agency: Caltrans – Maintenance/Traffic Safety

Fund Sources: *Pavement Rehabilitation:* SHOPP 201.121
Bridge Rehabilitation: SHOPP 201.110

Type of PID: PSSR

Environ Doc: PEAR

Project Capital Cost (estimated current year): Approximately $8.305 million (without support cost)

Current Status: The Office of Advance Planning is "refreshing" a Project Scope Summary Report (PSSR) which was approved on October 2, 2001 to provide updates on the project scope, schedule, and cost estimates in order for this PSSR to be programmed in the SHOPP 2012 cycle, under the 201.121 program (CAPM) and 201.110 program (Bridge Rehab).

Outstanding Issues: No outstanding issues.

Tentative Schedule:

PSSR Approval	09/16/2011
PA&ED	07/01/2013
District PS&E	07/01/2015
RTL	11/01/2015
Approve Contract	03/01/2016
Contract Acceptance	03/01/2017
End Project	09/01/2017

Responsible Unit (*Lead*):

Yadollah Fathollahi	- Project Manager	(510) 286-6018
Robert Blanco	- Branch Chief, PSR II	(510) 286-5676
Jonathan Dang	- Project Engineer	(510) 622-5963

Updated: 9/16/2011
Prepared By: JD

04-CC-242-PM 0.0/3.4
PSSR REFRESHER
PAVEMENT REHABILITATION + REPAIR SLIP-OUT RAMP (EA 26980K, SHOPP 201.121)
BRIDGE REHABILITATION (EA 4G060K, SHOPP 201.110)

PROJECT CAPITAL & SUPPORT COST ESTIMATE SUMMARY (CURRENT & ESCALATED)									
PROJECT COST COMPONENT	**CURRENT COST ESTIMATE**			**ESCALATED COST ESTIMATE**					
	PSSR Refresher (September 2011)			**RTL (November 2015)**			**Mid-Year Construction (September 2016)**		
	PAVEMENT, GUARDRAILS, DIKES	**REPAIR SLIP-OUT RAMP**	**BRIDGE REHAB**	**PAVEMENT, GUARDRAILS, DIKES**	**REPAIR SLIP-OUT RAMP**	**BRIDGE REHAB**	**PAVEMENT, GUARDRAILS, DIKES**	**REPAIR SLIP-OUT RAMP**	**BRIDGE REHAB**
R/W Capital	$5,000	$0	$0	$5,000	$0	$0	$5,000	$0	$0
Construction Capital	$5,321,000	$201,000	$863,000	$6,063,000	$229,000	$983,000	$6,286,000	$237,000	$1,020,000
10% Mobilization	$532,000	$20,000	$86,000	$606,000	$23,000	$98,000	$628,000	$24,000	$102,000
20% Contingency	$1,064,000	$40,000	$173,000	$1,212,000	$46,000	$197,000	$1,257,000	$47,000	$204,000
TOTAL CAPITAL (CONSTRUCTION & R/W)	**$6,922,000**	**$261,000**	**$1,122,000**	**$7,888,000**	**$297,000**	**$1,279,000**	**$8,178,000**	**$308,000**	**$1,326,000**
TOTAL SUPPORT (20% of TOTAL CAPITAL)	**$1,384,000**	**$52,000**	**$224,000**	**$1,578,000**	**$59,000**	**$256,000**	**$1,636,000**	**$62,000**	**$265,000**
TOTAL PROJECT COST (SUPPORT & CAPITAL)	**$8,306,000**	**$313,000**	**$1,346,000**	**$9,466,000**	**$356,000**	**$1,535,000**	**$9,814,000**	**$370,000**	**$1,591,000**
TOTAL CAPITAL COST (PAVEMENT+GUARDRAILS+DIKES & REPAIR SLIP-OUT RAMP)	$7,183,000			$8,185,000			$8,486,000		
TOTAL SUPPORT COST (PAVEMENT+GUARDRAILS+DIKES & REPAIR SLIP-OUT RAMP)	$1,436,000			$1,637,000			$1,698,000		
TOTAL CAPITAL COST (BRIDGE REHAB ONLY)			$1,122,000			$1,279,000			$1,326,000
TOTAL SUPPORT COST (BRIDGE REHAB ONLY)			$224,000			$256,000			$265,000

T0: Advance Planning-PSR II

Date September 7, 2011

Dist 4 Co CC Rte 242 PM 0.0/3.4
EA 26980K

Attention: Jonathan Dang
Project Engineer

From: ENID LAU
Right of Way Resource Manager

Roadway Rehab (PSSR Refresher)
D.S. #5992 (UPDATED)

Subject: Current Estimated Right of Way Costs

We have completed an estimate of the right of way costs for the above referenced project based on maps we received from you on August 24, 2011
and the following assumptions and limiting conditions.

[ ] 1. The mapping did not provide sufficient detail to determine the limits of the right of way required.

[ ] 2. The transportation facilities have not been sufficiently designed so our estimator could determine the damages to any of the remainder parcels affected by the project.

[ ] 3. Additional right of way requirements are anticipated, but are not defined due to the preliminary nature of the early design requirements.

[ ] 4. This estimate does not include $_____right of way costs previously incurred on the project, which may affect the total project right of way costs for programming purposes.

[ ] 5. We have determined there are no right of way functional involvements in the proposed project at this time, as designed.

Right of Way Lead Time will require a minimum of 6 months after we begin receiving final right of way requirements (PYPSCAN node No. 224), necessary environmental clearance has been obtained, and freeway agreements have been approved. From the date of receipt of final right of way requirements (PYPSCAN node No. 265), we will require a minimum of 4 months prior to the date of certification of the project. Shorter lead times will require either more right of way resources or an increased number of condemnation suits to be filed. Either of these actions may reflect adversely on the District's other programs or our public image generally.

Right of Way Resource Manager

Attachments:

[ ] Right of Way Data Sheet – Page One (always required)
[ ] Right of Way Data Sheet – All Pages (required when interest in real property is being acquired)
[ ] Utility Information Sheet
[ ] Railroad Information Sheet

RIGHT OF WAY DATA SHEET

TO: Office of Advance Planning

Date 8/31/2011 D.S. # 5992

Dist. 04 Co. CC Rte 242 PM 0.0/3.4

EA 04-26980K (04)

ATTN: ROBERT BLANCO

Project Description: Roadyway Rehab.

SUBJECT: Right of Way Data - Alternate No.

1. Right of Way Cost Estimate:

		Current Value (Future Use)	Escalation Rate	Escalated Value
A.	Acquisition, including Excess Lands, Damages, and Goodwill	$0.00	%	$0.00
	Project Permit Fees			$0.00
	Grantor's Appraisal Cost			$0.00
B.	Utility Relocation (State Share)	$5,000.00	%	$5,000.00
C.	Railroad (from page 6)			$0.00
D.	Relocation Assistance	$0.00	%	$0.00
E.	Clearance Demolition	$0.00	%	$0.00
F.	Title and Escrow Fees	$0.00	%	$0.00
G.	TOTAL ESCALATED VALUE			$5,000.00
H.	Construction Contract Work	$0.00		

2. Anticipated Date of Right of Way Certification 8/2014

3. Parcel Data:

	Type	Dual/Appr		Utilities	
X			U4-1		
A			-2		
B			-3		
C			-4		
D			U5-7	2	
E	XXXX		-8		
F	XXXX		-9		

Total 0

RR Involvements	
None	X
C&M Agrmt	
Svc Cont.	
Design	
Const.	
Lic/RE/Clauses	

Misc R/W Work	
RAP Displ	0
Clear Demo	0
Const. Permits	0
Condemnation	0

Areas: Right of Way 8/31/11 No. Excess Parcels / Excess

Enter PMCS Screens By M.C.

Enter AGRE Screen (Railroad Data Only) By

4. Are there any major items of construction contract work?
Yes ☐ No ☑ (If yes, explain)

5. Provide a general description of the right of way and excess lands required(zoning, use, major improvements critical or sensitive parcels, etc.).
No right of way required. ☑

6. Is there an effect on assessed valuation? (If yes explain)
Yes ☐ Not Significant ☐ No ☑

7. Are utility facilities or rights of way affected? Yes ☑ No ☐
If yes, attach Utility Information Sheet Exhibit 01-01-05)

8. Are railroad facilities or rights of way affected? Yes ☐ No ☑
If yes, attach Railroad Information Sheet Exhibit 01-01-06)

9. Were any previously unidentified sites with hazardous waste and/or material found?
Yes ☐ None evident ☑
(If yes, attach memorandum per Procedural Handbook Volume 1, Section 101.011)

10. Are RAP displacements required? Yes ☐ No ☑
(If yes, provide the following information)

No. of single family _____ No. of business/non profit _____

No. of multi-family _____ No. of farms _____

Based on Draft / Final Relocation Impact Statement / Study dated _____, it is anticipated that sufficient replacement housing will / will not be avaialable without Last Resort Housing.

11. Are material borrow and / or disposal sites required? Yes ☐ No ☑
(If yes, expalin)

12. Are there potential relinquishments / abandonments? Yes ☐ No ☑
(If yes, expalin)

13. Are there any existing and/or potential Airspace sites? Yes ☐ No ☑
(If yes, expalin)

14. Are there Environmental Mitigation costs? Yes ☐ No ☑
(If yes, explain)

15. Indicate the anticipated Right of Way schedule and lead time requirements. (Discuss if District proposes less that PMCS lead time and / or if significant pressures for project advancement are anticipated.)

PYPSCAN lead time (from Regular R/W to project certification) 6 months.

16. Is it anticipated that all Right of Way work be performed by CALTRANS staff?
Yes ☑ No ☐ (If no, discuss)

Assumptions and Limiting Conditions

- This data sheet was completed without a hazardous waste/materials report.
- Information on this data sheet was based on maps provided by Robert Blanco on 8/24/2011

Evaluation Prepared By: Renata Frey

Right of Way: Name Renata Frey Date 8/31/11

Railroad: Name [signature] Date 8-31-11

Utilities: Name [signature] Date 8-31-11

Recommended for Approval:

[signature]

Right of Way Capital Cost Coordinator

I have personally reviewed this Right of Way Data Sheet and all supporting information. It is my opinion that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper subject to the limiting conditions set fourth, and find this Data Sheet complete and current.

[signature]

Chief, R/W Appraisal Services

9-7-11

Date

cc: Program Manager
Project Manger

UTILITY INFORMATION SHEET

1. Utility owners located within project limits:
PG&E, AT&T, Comcast, CCCSD, CCWD

2. Facilities potentially impacted by project (if known, include Owners(s) & facility type(s)):
None

3. Anticipated Workload:
   - X Utility Verification required
   - _____ Positive Identification
   - _____ Utility Relocation
   - _____ Other (Specify)

4. Additional information concerning anticipated utility involvements (include limiting conditions and a narative addressing likelihood that conflicts will occur);

   _____ Involves possible relocation of electric transmission facilities
   (If X'd, Data sheet should be forwarded to environmental)

5. PMCS input information

U4-1	_____	Owner Expense Involvements
U4-2	_____	State Expense Involvements *(Conventional, No Fed Aid)*
U4-3	_____	State Expense Involvements *(Freeway, No Fed Aid)*
U4-4	_____	State Expense Involvements *(Conventional or Freeway, Fed Aid)*
U5-7	2	Verifications - without involvements
U5-8	_____	Verifications - 50% involvements
U5-9	_____	Verifications resulting in involvements

NOTE: The sum od U-4's must equal the sum of ½ of the U5-8's and all of the U5-9's.

ESTIMATED STATE SHARE OF COSTS $ **5000**

Perepared by: Leo Munneke

Leo Munneke
Right of Way Utility Coordinator

8/31/11
Date

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: ROBERT BLANCO
District Branch Chief
Office of Advance Planning – PSR II

Attn. Jonathan Dang

Date: September 1, 2011

File: 04-CC 242 PM 0.0/3.4
04-26980K
Expedited 2012 SHOPP
PID Candidate - CAPM

From: PAULA KINDINGER-WILCOX
Materials Design Engineer
Engineering Services I-Materials A

Concurred by: FARAH BIRANG, P.E. F.B.
District Branch Chief, WPS
Engineering Services I - Materials

Subject: CAPM Preliminary Materials Recommendations for PID

This memo is in response to your request to provide your office with preliminary Materials Recommendations for a CAPM project which proposes to preserve the existing roadway by replacing failed PCC slabs and grinding the whole width of the PCC pavement, digging out and replacing failed Asphalt Concrete pavement on the mainline and all ramps, and overlaying the AC pavement within the project limits. This project also proposes to reconstruct failed AC shoulders on the mainline and on SB Olivera Rd. On-ramp

EXISTING FACILITY

Route 242, at the above location, is a 6 lane divided highway with substandard shoulder widths. In each direction of travel, the roadway consists of an AC no.1 lane with the 2 outside lanes consisting of PCC. The shoulders are also AC. Based on a review of our Materials Files and the available as-builts, this portion of Route 242 was originally built in 1962 under contract 4TOH1103 with 2 lanes in each direction consisting of 0.67' PCC / 0.33' CTB(B) / 1.0' AS(2). The shoulders were constructed of 0.25' AC(A) / 0.75' AB(2) / 1.0' AS(2). Ramps were also constructed under this contract with 0.25' AC(A) / 0.67' CTB / AS(2). They include Solano on and off ramps, Willow Pass Rd on and off ramps and Concord Ave NB on and SB off. The inside lane was constructed in 2001 under contract 228351 with 180 mm AC / 195 CTB(A) / 205 or 305 mm Lime Treated Subgrade, depending on the location. In the year 2000, AC auxiliary lanes were added in both directions, from Concord Ave to Grant / Solano Way, under contract 228294. The auxiliary lanes were constructed of 0.40' to 0.60' AC(A) / 0.60' to 0.80' AB(3) /

0.75' to 1.05' AS(4) with an ATPB layer and edge drains in the area near the sound wall on the SB side. Also in this contract Concord Ave NB and SB on and off ramps and the Grant / Solano SB on and off ramps were constructed with 0.50' AC(A) / either ATPB or AB(3) / AS(4). Edge drains were placed on most of those ramps.
The NB PCC between PM 1.5 to 1.7 and PM 2.5 to the end of the route was overlaid with an unknown thin AC layer.

EXISTING CONDITIONS

Based on our field observations on August 22 and 25, 2011, review of the Pavement Condition Survey and review of the Roadway Explorer, we have noted the following problems with the existing pavement. According to the attached 2007 Pavement Condition Report (PCR), there are many locations with an unacceptable Internal Roughness Index (IRI); an acceptable IRI is below 170.

- During our site visit we noticed the PCC portion of Highway 242 appears to be in poor condition in some areas, with a lot of stage 3 cracking in the no. 3 lane and also a moderate amount of 3rd stage cracking in the no. 2 lane along with faulting and large transverse cracks. The PCC has been patched in many locations; some patching was done with AC and some with concrete. There are also a lot of sealed cracks visible.
- The inside AC lane appears to be in fair to good condition with a few visible cracks. The PCC roadway with the thin AC layer has joints reflecting through the AC near the Olivera off-ramp along some raveling, alligator cracking and a few large transverse cracks.
- Also noted, is the condition of the ramps within the project limits. While most ramps are in fair to good condition with only slight alligator cracking, Olivera SB on-ramp is in poor condition. The ramp has a slope that is slipping, and the shoulders seem to be pulling away from the traveled way and are crumbling apart.
- The outside AC shoulders on the mainline are in good to poor condition with an extensive amount of cracking, potholes, and rutting in the bad areas.

PAVEMENT RECOMMENDATIONS

AC Preparatory Work

A.

1. Conduct a field review and locate specific areas of severe distress identified by alligator "B" or "C" cracking, rutting greater than 1" and/or loose and spalling pavement.
2. Dig out and repair with HMA-A, the distressed localized areas to the bottom of the AC layer or up to a maximum of 0.50' in depth, whichever is less. However, for the areas with severe alligator cracking or potholes, it will be necessary to dig out the full depth of the AC.

3. Clean and seal all cracks wider than 1/4". Squeegee off any excessive crack sealant on the surface.

B.

1. Repair the transverse crack at approximately PM 1.7 in the NB direction. Dig out to the bottom of the AC layer and 5' feet on each side of the crack, replace with HMA-A and then follow the AC mainline recommendations below.

AC MAINLINE

- Where the No 1 lane is adjacent to PCC lanes; cold plane the existing pavement to a depth of 0.20' and replace with 0.20' RHMA-G
- In the areas which are PCC with an AC overlay; use the following recommendation from edge of pavement to edge of pavement.
    - Place 0.10' HMA-A, then place a Geosynthetic Paving Mat before overlaying the pavement with 0.15' RHMA-G, this will help retard the joints reflecting through the AC.

PCC MAINLINE

All lanes of existing PCC pavement shall be ground to correct poor ride quality as the result of faulting, slab curls, and irregular slab replacement surfaces.

Prior to grinding we recommend:

- All slabs with 3rd stage cracking should be removed and replaced, excluding the existing CTB layer. In order not to damage the adjacent slabs and CTB base, the slab removal techniques as described in the September 2008, Caltrans Slab Replacement Guidelines should be used.

    1. If slab removal causes excessive damage, such as significant removal of the CTB or excessive fracturing of the CTB, the entire base must be removed and replaced with rapid strength concrete (RSC).

    2. We recommend using RSC for slab replacement due to the anticipated short construction window. The RSC should be placed in split pour with a bond breaker between RSC layers if both the CTB and the PCC slab are replaced. We recommend reserving additional funds of 10% of slab replacement and cost for replacing the CTB layer if necessary.

- Slab Repair: We recommend repairing spalls and corner cracks and routing, cleaning and sealing all other cracks wider than 1/4"

MAINLINE SHOULDERS

- Shoulders in fair to good condition next to the PCC lanes: Cold plane 0.15'and replace with 0.15' RHMA-G
- Shoulders in the AC sections should be treated with the same CAPM solution as the adjacent AC mainline.
- Shoulders in poor condition: Reconstruct with the following section*:

  We will assume an R-value of 15 and use a TI of 9 which is according to the document, Expectations for Pavement SHOPP PID Documents, dated 08/26/2011 by Bill Farnbach. When this project is scheduled and goes to PS&E, we will verify the R-value by sampling and testing the soil.

  Design Factors: TI = 9, R_v = 15, G.E. = 2.45'

Shoulders	G.E.
1.10' HMA-A	2.51'

* There may be retrofitted edge drains in the existing shoulder sections, please remove and do not replace them.

APPROACHES and DEPARTURES

Based on our field review, we believe most approaches and departures need work as a part of the CAPM project. We recommend contacting the Office of Structures for final recommendations regarding rehabilitation and/or retrofitting with new approach slabs.

RAMPS

1. **SB Olivera Rd. On Ramp**

   - We recommend contacting the Geotechnical Department regarding the slope slipping on this ramp in order to investigate possible causes.
   - Reconstruct the shoulders of this ramp using the following shoulder section:

     Design Factors: TI = 9, R_v = 15, G.E. = 2.45'

	Shoulders	G.E.
	0.20' RHMA-G	
	0.70 HMA-A	2.03' (GE for total HMA)
	0.50' AB(2)	0.55'
Total	1.40'	2.58'

- Place 0.20' RHMA-G over the existing traveled way, if there is a need to maintain the existing profile, we recommend cold planing the existing pavement to depth of 0.20' and replacing with 0.20' RHMA-G.

2. **All Ramps except Olivera Rd. SB On Ramp**

- Place 0.15' of RHMA-G on ramps with no profile restrictions
- Where there is a need to maintain the existing profile we recommend cold planing 0.15' of the existing pavement and replacing with 0.15' RHMA-G

Notes:

RHMA-G has temperature constraints, the atmospheric temperature must be at least 55 °F when RHMA is spread and compacted and the surface temperature must be at least 60 °F. Since this area can be cool and foggy, even during the summer nights, the project must be scheduled at a time when RHMA placement will be successful.

If you have any questions, please call Paula Kindinger-Wilcox at 286-4692.

c: PKindinger-Wilcox, Route File, Daily File,

PRELIMINARY ENVIRONMENTAL ANALYSIS REPORT

Project Information

District	County	Route	PM	EA
04	CC	242	0.0/3.4	26980K
Project Title Roadway Rehabilitation				
Project Manager Patrick Pang			Phone # 510.286.5080	
Project Engineer Robert Blanco			Phone # 510.286.5676	
Environmental Office Chief/Manager Melanie Brent			Phone # 510.286.5231	
PEAR Preparer Peter Frey			Phone # 510.622.8835	

Project Description

Purpose and Need

The purpose is to provide preventative treatments to preserve the good condition of the existing roadway pavement and to provide pavement rehabilitation to extend its service life.. The need is to improve the poor condition of the existing facilities, and improve safety.

Description of work

In Contra Costa County in the city of Concord on Route 242 from I-680 to Route 4 , this project proposes to replace the failed PCC with 3rd stage cracks, repair spalls, seal cracks, grind the whole width of the PCC pavement , repair failed outside shoulders, overlay on-ramp and off-ramps with AC, improve drainage work, install Metal Beam Guard Rails, remove and replace Type A dikes with Type E dikes at specific locations, upgrade curb ramps and pedestrian facilities to ADA standards, and bring the existing bridge railings on bridges within the project limits to current standard.

Alternatives

The build alternative includes the elements described above. The no build alternative leaves the existing facility unchanged.

Anticipated Environmental Approval

CEQA		NEPA	
Environmental Determination			
Statutory Exemption	☐		
Categorical Exemption	☒	Categorical Exclusion	☒
Environmental Document			
Initial Study or Focused Initial Study with proposed Negative Declaration (ND) or Mitigated ND	☐	Routine Environmental Assessment with proposed Finding of No Significant Impact Complex Environmental Assessment with proposed Finding of No Significant Impact	☐ ☐
Environmental Impact Report	☐	Environmental Impact Statement	☐
CEQA Lead Agency (if determined): The California Department of Transportation (Caltrans) is the lead CEQA Agency for the project. FHWA assigned, and Caltrans has assumed, all of the United States Department of Transportation (USDOT) Secretary's responsibilities under NEPA.			
Estimated length of time (months) to obtain environmental approval:			12
Estimated person hours to complete identified tasks:			2619

PEAR Technical Summaries

Farmlands/Timberlands: There are farmlands adjacent to the project area. The proposed project will not require right-of-way currently under cultivation or used for grazing.

Community Impacts: The proposed project will not result in adverse impacts on population growth/sprawl, local economy, municipal or community services, utility services, community character, or existing or proposed land use. There are no Title VI issues, adverse impacts to minority and low-income populations expected.

Visual/Aesthetics: The proposed project is not expected to adversely affect any scenic or visual resources.

Cultural Resources: A records search and a review of in-house resources will be required. We do not anticipate any adverse effects.

Water Quality and Storm Water Runoff: This project must comply with the Department Statewide National Pollutant Discharge Elimination System (NPDES) Permit (Order No.: 99-06-DWQ) and the Construction General Permit (Order No.: 2009-0009-DWQ), both issued by the State Water Resources Control Board (SWRCB). Under the auspices of the SWRCB, the San Francisco Bay Regional Water Quality Control Board (Region 2) has authority to enforce NPDES and Construction General Permit requirements. To comply with these permits, the Department shall consider and incorporate temporary and permanent Best Management Practices (BMPs) using Best Available Technology (BAT) to the Maximum Extent Practicable (MEP), in order to minimize, or prevent, any potential increased impact to existing water quality.
Per the Construction General Permit, development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) is required; this shall be prepared per Department Standard Special Provision (SSP) 07-345. The SWPPP is developed by the Contractor, and approved by the Department, prior to commencement of construction. In addition to the general permits mentioned above, it should be anticipated that a 401 Certification, issued by Region 2, will be required. This is to be anticipated, due to proposed drainage work. If this is required, then there may be a conflict with the CE designation.

Hazardous Waste/Materials: The only hazardous waste issue in this project is the bridge railings. If they are to be replaced, they will need to be tested. There are no other hazardous waste issues in this project.

Air Quality: The Project is exempt from the requirement of air quality conformity determination. An air quality study is not required.

Noise and Vibration: The Project has no traffic noise impacts. A noise study will not be required.

Biological Environment:

Caltrans Biologist, Fernando A. Martinez performed a review of threatened and endangered species using the USFWS Endangered Species List website (http://www.fws.gov/sacramento/es/spp_list.htm) and the California Natural Diversity Database (CNDDB, California Department of Fish and Game) on September 1, 2011. This project occurs within the Walnut Creek and Vine Hill U.S. Geological Survey (USGS) quadrangles. Fernando assessed this location for potential biological constraints to the completion of this project using photographs and aerial images. A site visit will need to be conducted to further assess the project location.

Habitat

The proposed work area passes through a highly urbanized area of Contra Costa County. The highly urbanized area includes dense residential and commercial areas associated with the city of Concord. The vegetated areas in the adjacent shoulder and median consist of ruderal grass, low growing annual/perennial vegetation and sparse non-native

trees with small patches scrub. Trees and shrubs located within this right-of-way area are mainly highway landscaping, but may also contain a small number volunteer plants. A site visit will need to be conducted in order to finalize assessment for vegetative communities.

Flora/Fauna

The site was surveyed for federal and state listed plant and animal species habitats using USFWS and CDGF databases, aerial images and photographs. A site visit will need to be conducted in order to finalize assessments for listed plant or animal species. Flora and fauna is limited in the project location. Flora is limited to the median and shoulders. Proximity to SR 242 would limit the existence of fauna on the project site; however habitat disbursements for the California tiger salamander (Fig. 1) have been identified in proximity to the proposed project location.

Table 1. CNDDB results in Walnut Creek and Vine Hill USGS quadrangles.

Common Name	Scientific Name	Listing Status*	
		Federal	State
soft bird's-beak	*Chloropyrin molle ssp. molle*	E	R
Contra Costa goldfields	*Lasthenia conjugens*	E	-
Mason's lilaeopsis	*Lilaeopsis masonii*	-	R
callippe silverspot butterfly	*Speyeria callippe calippe*	E	-
California red-legged frog	*Rana draytonii*	T	-
Alameda whipsnake	*Masticphis lateralis euryxanthus*	T	T
salt marsh harvest mouse	*Reithrodontomys raviventris*	E	E
vernal pool fairy shrimp	*Branchinecta lynchi*	T	-
California freshwater shrimp	*Syncaris pacifica*	E	
giant garter snake	*Thamnophis gigas*	T	T
California tiger salamander	*Syncaris pacifica*	T	T
valley elderberry longhorn beetle	*Desmocerus califonicus dimorphus*	T	
delta green ground beetle	*Elaphrus viridis*	T	
green sturgeon	green sturgeon	T	
delta smelt	*Hypomesus transpacificus*	T	E
Central Valley steelhead	*Oncorhynchus mykiss*	T	-
Central Valley spring-run chinook salmon	*Oncorhynchus tshawytscha*	T	T
winter-run chinook salmon	*Oncorhynchus tshawtscha*	E	C
western snowy plover	*Charadrius alexandrines nivosus*	T	-
California clapper rail	*Rallus longirostris obsoletus*	E	E
California black rail	*Laterallus jamaicensis coturniculus*	-	T
California least tern	*Sternula antillarum browni*	E	E

*Status: E = Endangered, T = Threatened, R = Rare, C = Candidate

Caltrans concludes that this project will not have an effect to listed species because all work will be confined to existing paved footprints and disturbed road shoulders within existing Caltran's right of ways. Based on the project description no additional impacts will be imposed on any unpaved surfaces. Should there be any changes to these plans; the biologist will need additional site visits to determine any additional impacts. Should any rehabilitations or improvements be conducted off-pavement within any sensitive areas, agency coordination should be anticipated prior to any construction activities.

Wetlands/Water:

Any rehabilitations or improvements which may affect wetlands or waterways will require a site visit in order to finalize assessment based upon final plans. It is anticipated that the proposed project will be conducted on existing road surfaces that cross USACE and CDFG 1602 jurisdictional areas.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA; 16 U.S.C. 703-711) protects migratory birds from unlawful activities. Any work within the project limits during nesting season will require protections for Migratory Nesting Birds. Caltrans' constraints measures will provide protection for these species for this project (see Constraints section).

Permits

It is unlikely that permitting with USACE, CDFG, USFWS, and NOAA will be necessary as this project will be confined to the existing roadway, and areas to be impacted are unsuitable habitat for threatened or endangered species. However, should any work occur within 1602 jurisdiction formal consultation should be expected due to anadromous fish species and proximity to California tiger salamander occurrences (Fig. 1).

Constraints

The following measures are necessary to protect biological resources:

- Contractors should utilize Caltrans standard Best Management Practices (BMPs).

- Contractors will conduct all pavement rehabilitations and improvements while operating on existing paved footprints.
- Any off-pavement rehabilitation or improvements made will require further assessments, surveys, permitting and Section 7 consultation should be anticipated.
- Any waste materials or products (i.e. pavement grindings) shall be disposed of at an approved facility, or certified landfill
- All staging will occur within existing paved or gravel turnout areas. Any staging in vegetated areas (grass and low-growing vegetation) or off-pavement will require additional assessments from a Caltrans biologist.
- Standard BMPs material shall be in place under any construction equipment being stored, refueled, or maintained at staging area.
- Contractors must implement Caltrans standard BMPs to ensure water quality and limit air borne erosion.
- Environmentally Sensitive Areas (ESAs), including special aquatic features will be identified by ESA (high visibility) orange fencing to be established by Caltrans biologist and the RE prior to construction.
- Any improvements or alterations to any drainage or culverts will require further assessments by a Caltrans biologist to establish any USACE and CDFG jurisdictional areas. Additionally, permitting measures should be anticipated for any work occurring within these areas.
- If clearing and grubbing is required, as a precaution, a Caltrans Biologist will need to conduct additional site assessments to rule out the presence of any species of concern.
- Biologist will need to conduct nesting bird surveys between February 1 and August 15 to comply with the MBTA. A Caltrans Biologist will need three days notice prior to commencement of construction activities to perform a survey for nesting birds.

It is in Caltrans opinion that by complying with these constraints that the proposed work at this location will not affect any listed species.

Further Inquires for Design/Construction

- Will there be a need for additional site assessments for staging locations?
- Will there be any effects to existing waterways with these improvements?

All design changes will require reassessment of biological resources and may delay project. Please forward all plans to the Office of Biological Sciences and Permits as soon as possible.

If you have any questions please contact Fernando Martinez at (510) 286-5999 or Christopher States at (510) 286-7185.

Context Sensitive Solutions: Context sensitive solutions meet transportation goals in harmony with community goals and natural environments. They require careful, imaginative, and early planning and continuous community involvement. There were no early planning activities and community involvement efforts that were undertaken during this initial phase of project development. The project, by its nature is not expected to conflict in harmony with community goals and the natural environment.

Disclaimer

This Preliminary Environmental Analysis Report (PEAR) provides information to support programming of the proposed project. It is not an environmental determination or document. Preliminary analysis, determinations, and estimates of mitigation costs are based on the project description provided in the Project Study Report (PSR). The estimates and conclusions in the PEAR are approximate and are based on cursory analyses of probable effects. A reevaluation of the PEAR will be needed for changes in project scope or alternatives, or in environmental laws, regulations, or guidelines.

Review and Approval

I confirm that environmental cost, scope, and schedule have been satisfactorily completed and that the PEAR meets all Caltrans requirements. Also, if the project is scoped as a routine EA, complex EA, or EIS, I verify that the HQ DEA Coordinator has concurred in the Class of Action.

Celia McAuley
Environmental Branch Chief — Date: 9/16/11

Project Manager — Date: 9/16/11

REQUIRED ATTACHMENTS:
Attachment A: Environmental Technical Reports or Studies Required
Attachment B: PEAR Mitigation and Compliance Cost Estimate

26960K

Attachment A: Environmental Technical Reports or Studies Required

	Study or Report	Document Text Only	Not Anticipated
Community Impact Study	☐	☐	☒
Farmland	☐	☐	☒
Section 4(f) Evaluation	☐	☐	☒
Visual Resources	☐	☐	☒
Water Quality	☒	☐	☐
Floodplain Evaluation	☐	☐	☒
Noise Study	☐	☒	☐
Air Quality Study	☐	☒	☐
Paleontology	☐	☐	☒
Wild and Scenic River Consistency	☐	☐	☒
Cumulative Impacts	☐	☐	☒
Growth Inducing/Indirect Impacts	☐	☐	☒
Cultural			
Archaeological Survey Report (ASR)	☐	☒	☐
Historic Resources Evaluation Report (HRER)	☐	☐	☒
Historic Property Survey Report (HPSR)	☐	☒	☐
Historical Resource Compliance Report	☐	☐	☒
SHPO / PRC 5024.5	☐	☐	☒
Native American Coordination	☒	☐	☐
Other Finding of Effect:	☐	☐	☒
Data Recovery Plan:	☐	☐	☒
Memorandum of Agreement* (*if Federal Permit is required)	☐	☐	☒
Hazardous Waste			
ISA (Additional)	☐	☐	☒
PSI	☒	☐	☐
Other	☐	☐	☐
Biological			
Endangered Species (Federal)	☒	☐	☐
Endangered Species (State)	☒	☐	☐
Species of Concern (CNPS, USFS, BLM, S, F)	☒	☐	☐
Biological Opinion (USFWS, NMFS, State)	☒	☐	☐
Fish Passage Barriers Assessment	☒	☐	☐
Wetlands	☒	☐	☐
Invasive Species	☒	☐	☐
Natural Environment Study	☒	☐	☐
NEPA 404 Coordination	☐	☐	☒
Other	☐	☐	☐

Permits

401 Permit Coordination	☒	☐	☐
404 Permit Coordination	☒	☐	☐
1602 Permit Coordination	☒	☐	☐
City/County Coastal Permit Coordination	☐	☐	☒
State Coastal Permit Coordination	☐	☐	☒
NPDES Permit (402) Coordination	☒	☐	☐
US Coast Guard (Section 10)	☐	☐	☒

Attachement B: PEAR Mitigation and Compliance Cost Estimate*

District 04	County CC	Route 242	PM 0.0/3.4	EA 26980K

Description of Work Roadway Rehabilitation

Project Manager	Patrick Pang	Date	9-15-11

Prepared by	Peter Frey	Date	9-15-11

	Mitigation			Compliance
	Project Feature[1]	Enviro. Obligation[2]	Statutory Require.[3]	Permit & Agreement[4]
Fish & Game 1602 Agreement				
Coastal Development Permit				
State Lands Agreement				
NPDES Permit				
COE 404 Permit- Nationwide				
COE 404 Permit- Individual				
COE Section 10 Permit				
COE Section 9 Permit				
Other: Noise attenuation				
Special landscaping				
Archaeological				
Biological				
Wetland/riparian				
Historical				
Scenic resources				
Asbestos Testing/Mitigation				
Other:				
TOTAL (Enter zeros if no cost)	TBD	TBD	TBD	TBD

Costs are to include all costs to complete the commitment including: 1) capital outlay and staff support; 2) cost of right-of-way or easements; 3) long-term monitoring and reporting; and 4) any follow-up maintenance.

[1] Mitigation that Caltrans would normally do if not required by a permit or environmental agreement.
[2] Mitigation that Caltrans would not normally do but is required by conditions of a permit or environmental agreement.
[3] Mitigation that Caltrans would not normally do and is not required by a permit or Enviro. Agreement, but is required by a law.
[4] Non-mitigation Caltrans would not normally do but is required by conditions of a permit or agreement.

*Prepare a separate form for each practicable alternative in the PSR.

TRANSPORTATION MANAGEMENT PLAN DATA SHEET
(Preliminary TMP Elements and Costs)

Co/Rte/PM **CC-242-PM R0.0/R3.4** EA 26980k Project Engineer Jonathan Dang

Project Limit **In Contra Costa County on highway 242 between PM0.0 to PM3.4**

Project Description Pavement Rehab

1) Public Information

- ☐ a. Brochures and Mailers $
- ☐ b. Press Release
- ☐ c. Paid Advertising $
- ☐ d. Public Information Center/Kiosk $
- ☐ e. Public Meeting/Speakers Bureau
- ☐ f. Telephone Hotline
- ☐ g. Internet, E-mail
- ☒ h. Notification to impacted groups (I.e. bicycle users, pedestrians with disabilities, others...)
- ☒ i. Others $5,000

2) Traveler Information Strategies

- ☐ a. Changeable Message Signs (Fixed) $
- ☒ b. Changeable Message Signs (Portable) $65,000
- ☐ c. Ground Mounted Signs $
- ☐ d. Highway Advisory Radio $
- ☐ e. Caltrans Highway Information Network (CHIN)
- ☒ f. Detour maps (i.e. bicycle, vehicle, pedestrian...etc)
- ☐ g. Revised Transit Schedules/maps
- ☒ h. Bicycle community information
- ☐ i. Others _____ $

3) Incident Management

- ☒ a. Construction Zone Enhanced Enforcement Program (COZEEP) $260,000
- ☐ b. Freeway Service Patrol $
- ☐ c. Traffic Management Team
- ☐ d. Helicopter Surveillance $
- ☐ e. Traffic Surveillance Stations (Loop Detector and CCTV) $
- ☐ f. Others _____ $

TMP Data Sheet (cont.)

4) Construction Strategies

- [x] a. Lane Closure Chart
- [ ] b. Reversible Lanes
- [ ] c. Total Facility Closure
- [ ] d. Contra Flow
- [ ] e. Truck Traffic Restrictions $_____
- [ ] f. Reduced Speed Zone $_____
- [ ] g. Connector and Ramp Closures
- [ ] h. Incentive and Disincentive $_____
- [ ] i. Moveable Barrier $_____
- [ ] _____ _____
- [ ] k. Others _____ $_____

5) Demand Management

- [ ] a. HOV Lanes/Ramps (New or Convert) $_____
- [ ] b. Park and Ride Lots $_____
- [ ] c. Rideshare Incentives $_____
- [ ] d. Variable Work Hours
- [ ] e. Telecommute
- [ ] f. Ramp Metering (Temporary Installation) $_____
- [ ] g. Ramp Metering (Modify Existing) $_____
- [ ] h. Others _____ $_____

6) Alternate Route Strategies

- [ ] a. Add Capacity to Freeway Connector $_____
- [ ] b. Street Improvement (widening, traffic signal... etc) $_____
- [ ] c. Traffic Control Officers $_____
- [ ] d. Parking Restrictions
- [ ] e. Others _____ $_____

7) Other Strategies

- [ ] a. Application of New Technology $_____
- [ ] e. Others _____ $_____

TOTAL ESTIMATED COST OF TMP ELEMENTS = $330,000.00

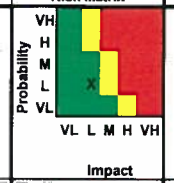
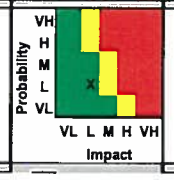
PREPARED BY Marisa M-Kleiber DATE 9/2/2011

APPROVAL RECOMMENDED BY Shein Lin DATE 9/2/2011

RISK MANAGEMENT PLAN
Dist-E.A.: 04-26980K
Co-Rte-PM: CC-242-0.0/3.4
SHOPP 201.121
PAVEMENT REHABILITATION

	Identification							Qualitative Analysis				Response Strategy			Monitoring and Control		
	Status	ID #	Date Identified Project Phase	Functional Assignment	Threat/Opportunity Event	SMART Column	Risk Trigger	Type	Probability	Impact	Risk Matrix	Strategy	Response Actions including advantages and disadvantages	Affected WBS Tasks	Responsibility (Task Manager)	Status Interval or Milestone Check	Date, Status and Review Comments
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(16)	(17)	(18)	(19)	(20)	(21)
	Active	1	8/22/11 PID	Program/ Project Management	PID was approved on 10/2/2001 to program in 2002 SHOPP, HA-22 Program, but not programmed, nor "refreshed" for re-programming. Project scope, cost & schedule were outdated. No back-up documents for project's quantities and costs estimate.	A brief field review was conducted to redefine the scope of work for refreshing the project cost. Scope was generally the same, but quantities of improvements changed due to recent pavement rehab performed to the roadway. Also, ADA Curb Ramps upgrade, ramps reconstruction and new MBGR construction were also proposed and added to the scope of this project.	Higher project cost due to additional proposed improvements could be a potential risk for project being considered for inclusion into 2012 SHOPP.	Scope Quality	Moderate	Moderate		Acceptance	Elevate issue to management for resolution		Program Advisor Project Manager		
	Dormant	2	8/22/11 PID	Right of Way	RWDS was completed on 9/3/1999. It was outdated. An additional proposed upgrade to existing curb ramps & sidewalks may require additional r/w take and and underground utilities relocation. Due to schedule constraint in refreshing this PSSR, there was no field review scheduled to further investigate the existing conditions of curb ramps.	Subject to underground utilities verifications, utility relocation(s) may be required.	Field reviews would be needed to determine whether R/W take and utilities relocation would be required for the curb ramps upgrade locations.	Cost Quality	Moderate	Moderate		Acceptance	Determine needs early in future field reviews; factor in costs/impacts		Project Manager Project Engineer Program Advisor R/W Manager		
	Dormant	3	8/22/11 PID	Environmental	The original PSSR is classified as a Categorically Exempt (CE) for CEQA and Programmatic Categorical Exclusion for NEPA. The CE was issued and signed on 9/29/1999 (CEQA) and 11/02/2000 (NEPA). It was outdated. Due to additional proprosed improvements, environmental determination for this project might be changed.	Assuming the CE is updated without any changes. Thus, the approved PSSR will proceed directly in Design Phase, bypassing the PA&ED Phase. No PA&ED time/schedule assigned.	Field reviews during the next phase would be required to further investigate for any potential impacts, environmentally.	Cost Schedule	Low	Low		Acceptance	Determine need for mitigation early during future field reviews; factor in increased costs/impacts.		Env. Analysis Mgr. Project Engineer		

RISK MANAGEMENT PLAN
Dist-E.A.: 04-26980K
Co-Rte-PM: CC-242-0.0/3.4
SHOPP 201.121
PAVEMENT REHABILITATION

	Identification							Qualitative Analysis				Response Strategy			Monitoring and Control		
	Status	ID #	Date Identified Project Phase	Functional Assignment	Threat/Opportunity Event	SMART Column	Risk Trigger	Type	Probability	Impact	Risk Matrix	Strategy	Response Actions including advantages and disadvantages	Affected WBS Tasks	Responsibility (Task Manager)	Status Interval or Milestone Check	Date, Status and Review Comments
	Dormant	4	8/22/11 PID	Environmental Engineering Water Quality	Stormwater Pollution Prevention Plan (SWPPP) and special provision for Non-Storm Water Discharges might be required due major AC/PCC rework anticipation.	SWPPP and Non-Storm Water Discharges requirements would identify construction period Best Management Practices (BMPs) to avoid impacts to surface waters.	Construction activities could pollute surface water bodies or cause band-side erosion.	Schedule Cost	Low	Low		Acceptance	Determine need for mitigation early during future field reviews; factor in increased costs/impacts.		Environmental Engineering Manager Water Quality		
	Dormant	5	8/22/11 PID	Hydraulics	Originally approved PSSR mentioned and allocated $400k for drainage rehab, but there were no project documents to specifically stating the proposed rehabilitation or improvements.	The proposed improvements as not specifically mentioned in the original PSSR might trigger potential project cost increase or decrease.	Recent field review was mainly focused on the existing rigid and flexible pavements condition. No observation was made to the existing drainage system.	Cost Schedule	Low	Low		Acceptance	Determine need for mitigation early during future field reviews; factor in increased costs/impacts.		Environmental Engineering Manager, Environmental Mitigation Manager		

Dist-County-Route: 04-CC-242
Post Mile Limits: R0.00/R3.40
Project Type: Pavement Rehabilitation
Project ID (or EA): 26980K
Program Identification:
Phase: √ PID
☐ PA/ED
☐ PS&E

Regional Water Quality Control Board(s): Region 2-San Francisco Bay Region

1.	Is the project required to consider incorporating Treatment BMPs?	Yes ☐	No √
2.	Does the project disturb 5 or more acres of soil?	Yes ☐	No √
3.	Does the project disturb more than 1 acre of soil and not qualify for the Rainfall Erosivity Waiver?	Yes ☐	No √
4.	Does the project potentially create permanent water quality impacts?	Yes ☐	No √
5.	Does the project require a notification of ADL reuse	Yes ☐	No √

If the answer to any of the preceding questions is "Yes", prepare a Long Form – Storm Water Data Report.

Estimate Construction Start Date: 3/1/2016 Construction Completion Date: 3/1/2017
Separate Dewatering Permit (if yes, permit number) Yes ☐ Permit #_____ No √
Erosivity Waiver Yes √ Date: _____ No ☐

This Short Form – Storm Water Data Report has been prepared under the direction of the following Licensed Person. The Licensed Person attests to the technical information contained herein and the data upon which recommendations, conclusions, and decisions are based. Professional Engineer or Landscape Architect stamp required at PS&E.

09/12/2011
Jonathan Dang, Registered Project Engineer *Date*

I have reviewed the stormwater quality design issues and find this report to be complete, current and accurate:

09/12/2011
[Stamp Required for PS&E only] for *Norman Gonsalves, District SW Coordinator or Designee* *Date*